

## **SPACE COOPERATION**

### **International Space Station**

**Agreement Between the  
UNITED STATES OF AMERICA  
and ITALY**

Effectuated by Exchange of Notes at Rome  
April 18, 2001 and January 11, 2005

*with*

Memorandum of Understanding



NOTE BY THE DEPARTMENT OF STATE

Pursuant to Public Law 89—497, approved July 8, 1966  
(80 Stat. 271; 1 U.S.C. 113)—

“ . . . the Treaties and Other International Acts Series issued under the authority of the Secretary of State shall be competent evidence . . . of the treaties, international agreements other than treaties, and proclamations by the President of such treaties and international agreements other than treaties, as the case may be, therein contained, in all the courts of law and equity and of maritime jurisdiction, and in all the tribunals and public offices of the United States, and of the several States, without any further proof or authentication thereof.”

## ITALY

### Space Cooperation: International Space Station

*Agreement effected by exchange of notes at  
Rome April 18, 2001 and January 11, 2005;  
Entered into force January 11, 2005.  
With memorandum of understanding.*



081/1110

## Ministero degli Affari Esteri

## NOTA VERBALE

Il Ministero degli Affari Esteri presenta i suoi complimenti all'Ambasciata degli Stati Uniti d'America ed ha l'onore di riferirsi all'unito Memorandum of Understanding, firmato a Roma il 9 ottobre 1997 tra l'Agenzia Spaziale Italiana (ASI) e la National Aeronautics and Space Administration (NASA) degli Stati Uniti, che stabilisce il programma bilaterale di collaborazione tra ASI e NASA per la progettazione, lo sviluppo, l'operazione e l'utilizzazione di tre mini moduli logistici pressurizzati per la Stazione Spaziale Internazionale.

L'elaborazione di tale testo si è resa indispensabile in considerazione delle modifiche tecniche apportate, nel corso degli anni '90, al progetto per la Stazione Spaziale Internazionale, cui l'Italia partecipa sia a livello bilaterale, avendo sottoscritto a tal fine il 6 dicembre 1991 un Memorandum of Understanding con gli Stati Uniti, sia a livello multilaterale, essendo Parte contraente dell'Accordo Intergovernativo che disciplina la cooperazione relativa alla Stazione Spaziale civile internazionale, firmato a Washington il 29 gennaio 1998.

Tenuto conto della necessità di aggiornare il predetto MOU del 1991 e considerato che il Memorandum del 1997, in base all'art.2.1, è giuridicamente subordinato all'Accordo Intergovernativo del 1998, ratificato in Italia con legge n.418/2000, ed in nessun modo deroga alle disposizioni in esso contenute, il Ministero degli Affari Esteri ha l'onore di proporre che, qualora il Governo degli Stati Uniti d'America concordi, la presente Nota, con accluso il Memorandum of Understanding, e la Nota di risposta di eguale tenore, costituiscano un Accordo tra i due Governi, che entrerà in vigore, ai sensi dell'art.23 dell'unito MOU, alla data della Nota di risposta.

Il Ministero degli Affari Esteri si avvale dell'occasione per rinnovare all'Ambasciata degli Stati Uniti d'America i sensi della sua più alta considerazione.

Roma, 18/04/01



Ambasciata degli Stati Uniti  
d'America  
ROMA

[INFORMAL TRANSLATION]

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The Ministry of Foreign Affairs presents its compliments to the Embassy of the United States of America and has the honor to refer to the attached Memorandum of Understanding, signed in Rome on October 9, 1997, between the Italian Space Agency (ASI) and the National Aeronautics and Space Administration (NASA), which establishes a bilateral program of cooperation between ASI and NASA for the planning, the development, the operation and the use of three pressurized logistical mini modules for the International Space Station.

The elaboration of that text has become indispensable in consideration of the technical modifications made, in the course of the 1990s, to the project for the International Space Station, in which Italy participates both at a bilateral level, having signed for that reason, on December 6, 1991, a Memorandum of Understanding with the United States, and at a multilateral level, as Contracting Party to the Intergovernmental Agreement that disciplines civil international cooperation relative to the Space Station, signed in Washington on January 29, 1998.

Taking into account the necessity for updating the aforementioned MOU, and considering that the Memorandum of 1997, on the basis of Article 2.1, is juridically subordinate to the Intergovernmental Agreement of 1998, ratified in Italy through law n. 418/2000, and in no way derogates the dispositions contained therein, the Ministry of Foreign Affairs has the honor to propose that, with the agreement of the Government of the United States of America, the present Note, with the attached Memorandum of Understanding, and the Note of response with equal content, constitute an Agreement between our two Governments, which will enter into force, within the meaning of Article 23 of the attached MOU, on the date of the Note of response.

The Ministry of Foreign Affairs takes the occasion to renew to the Embassy of the United States of America the assurances of its highest consideration.

Rome, 4/18/2001

**MEMORANDUM OF UNDERSTANDING**  
**BETWEEN THE**  
**UNITED STATES NATIONAL AERONAUTICS AND SPACE ADMINISTRATION**  
**AND THE,**  
**ITALIAN SPACE AGENCY**  
**FOR THE DESIGN, DEVELOPMENT, OPERATION AND UTILIZATION**  
**OF THREE MINI PRESSURIZED LOGISTICS MODULES**  
**FOR THE**  
**INTERNATIONAL SPACE STATION**

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The United States National Aeronautics and Space Administration (hereinafter "NASA")

and

The Italian Space Agency (hereinafter "ASI"),

RECALLING the long-standing and fruitful cooperation between NASA and ASI and its predecessors in the Italian National Research Council in the conduct of space science and applications research programs,

RECOGNIZING that the United States Government is strongly committed to building a permanently inhabited space station to provide a unique opportunity for international cooperation in space science and technology, and to take advantage of the low-gravity environment, the near-perfect vacuum of space and the potential of the space station's vantage point for observing the Earth and the rest of the Universe,

RECOGNIZING that NASA and ASI have completed a joint study to investigate the requirements for certain elements of the United States Space Station program, and taking note that the study indicated the potential mutual benefits that would result from cooperation between NASA and ASI in the Space Station program,

RECOGNIZING that NASA and ASI concluded a Memorandum of Understanding (MOU) in December 1991 for the development of Mini Pressurized Logistics Modules (MPLM) and a Mini Laboratory for the Space Station program,

RECOGNIZING that the Phase B (preliminary design) studies of the MPLMs were completed in 1992,

RECOGNIZING the redesign and transition activities of 1993 and 1994 that resulted in substantial modifications to the Space Station program and the content and requirements of the associated MPLM program,

HAVE AGREED as follows:

#### Article I - Purpose and Objectives

- 1.1. The purpose of this MOU is to establish that NASA and ASI (hereinafter referred to as "the Parties") will undertake a bilateral cooperative program covering the detailed design, development, and operation of three MPLMs which ASI will develop and provide to NASA as part of NASA's contribution to the International Space Station (ISS) program. In exchange, ASI will receive rights from NASA to utilize the ISS. The Parties jointly undertake this program with the purpose of advancing space science, technology, and
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the commercial use of outer space. These ASI-provided elements are a key part of the ISS and will aid NASA in fulfilling its responsibility to provide the flight elements identified in the Annex to the Agreement on Cooperation in the Detailed Design, Development, Operation, and Utilization of the Permanently Manned Civil Space Station of September 29, 1988 (the 1988 IGA), or any superseding Intergovernmental Agreement, and further elaborated in Article 3 of the implementing Space Station Memoranda of Understanding, specifically one set of Logistics Elements. The NASA provision to ASI of access to and use of the ISS will enable ASI to strengthen its scientific program in all disciplines to which the ISS offers experimentation opportunities.

**1.2. The specific objectives of this MOU are:**

(a) to define the ways and means by which cooperation between the Parties will be conducted within the framework of the United States Space Station program;

(b) to provide a general description of the MPLMs;

(c) to describe the roles and responsibilities of the Parties in the detailed design, development, and operation of the MPLMs, arrangements for ASI's utilization of the ISS, and the Parties' legal and financial commitments;

(d) to establish the managerial, technical and operational structures and interfaces necessary to ensure effective planning and coordination in the conduct of the detailed design, development, and operation of the MPLMs, and to ensure effective planning and coordination of ASI's utilization of the ISS; and

(e) to provide a framework that maximizes the total capability of the MPLMs to accommodate user needs and ensure that the MPLMs, as part of the United States Space Station program, will be operated in a manner that is safe, efficient and effective for both ISS users and ISS operators.

**Article 2 - Relationship to International Space Station Agreements: Order of Precedence**

**2.1. The Parties undertake the cooperation under this MOU exclusively as part of the United States' commitment to provide certain flight elements for the ISS. This MOU is subject to and in no way derogates from the provisions of the 1988 IGA and the Memoranda of Understanding referred to in Article 4.2 of the 1988 IGA, collectively referred to as the "1988 Space Station**

Agreements," or the respective rights or obligations under the 1988 Space Station Agreements of the United States and the Republic of Italy as Partner States, the Government of the United States as a Partner, or the Government of the Republic of Italy when acting collectively with the other European governments as the European Partner, whether or not these rights or obligations are specifically referred to or otherwise included in this MOU. All cooperation between NASA, for the Government of the United States, and ASI, for the Government of the Republic of Italy, under this MOU will be carried out consistent with the provisions of those agreements.

- 2.2 It is contemplated by the Parties that a new Intergovernmental Agreement will supersede the 1988 IGA and that new Memoranda of Understanding on Space Station cooperation will supersede the 1988 Memoranda of Understanding. When the applicable new agreements enter into force for both Parties and their respective Governments, all cooperation between the Parties under this MOU will be carried out consistent with the provisions of those new agreements. Until the 1988 Space Station Agreements are superseded, in the event there is any conflict between the provisions of this MOU and the 1988 Space Station Agreements, such conflict shall be resolved by giving precedence to the 1988 Space Station Agreements. Once the new Intergovernmental Agreement and new Memoranda of Understanding on Space Station cooperation have superseded the original corresponding agreements, in the event of a conflict between the provisions of this MOU and the new agreements, such conflict shall be resolved by giving precedence to the new agreements.

Article 3 - General Description of the ASI-provided Elements

- 3.1. Mini Pressurized Logistics Modules (MPLMs)
  - (a) The MPLMs are pressurized logistics modules, each capable of accommodating a total of 16 perimeter racks and 2 aisle storage containers. At a minimum, each MPLM will accommodate 15 racks, including a capability for refrigerator/freezer accommodation, for the purpose of transporting user payloads and resupply items in a pressurized environment to the ISS and returning cargo to the ground. ASI will provide a subsystem rack or equivalent and NASA will provide the remaining racks and the aisle storage containers. The MPLMs will be used as carriers for payload racks on utilization, outfitting and logistics resupply, and return flights. Their subsystem, docking/berthing mechanism, hatch and rack designs are to be

compatible with the ISS design. The MPLMs will be capable of remaining operational for approximately 10 years, with the support of ground maintenance, as appropriate. For a nominal mission, the MPLMs will be launched and returned on the same Space Shuttle flight.

(b) The MPLMs are part of the U.S. flight elements and are the pressurized carriers of the ISS Integrated Logistics System. The availability of the MPLMs will enhance the overall efficiency and flexibility of the ISS logistics elements by providing the capability to optimize the manifesting of both pressurized and unpressurized cargo on resupply/return missions to the ISS.

#### Article 4 - Registration, Jurisdiction and Control, and Ownership

- 4.1. Prior to shipping each MPLM, ASI, with NASA participation, will conduct a Final Acceptance Review, as described in the NASA/ASI Joint Management Plan (JMP), with NASA concurrence on its results. Upon delivery of the MPLMs to Kennedy Space Center (KSC) ASI, with the assistance of NASA, will conduct a post-delivery inspection. Upon completion of such inspection, satisfactory to NASA, ASI will transfer to NASA ownership of the MPLMs and associated Ground Support Equipment (GSE) and provide appropriate legal documentation evidencing such transfer. NASA will register these elements as space objects in accordance with Article II of the 1975 Convention on Registration of Objects Launched into Outer Space (hereinafter "the Registration Convention").
- 4.2. Pursuant to Article VIII of the 1967 Outer Space Treaty and Article II of the Registration Convention, and subject to the 1988 Space Station Agreements or any superseding agreements, NASA will retain jurisdiction and control over the elements it registers in accordance with Article 4.1 above, and each Party will retain jurisdiction and control over personnel in or on the ISS who are its nationals.

#### Article 5 - Major Program Milestones

- 5.1. Because of the extended period of time required to assemble the ISS and the integrated nature of its assembly sequence, the delivery schedule for ASI-provided elements may be revised over the life of the ISS program. Major program milestones of the MPLMs may be affected by changes to the ISS program milestones.

5.2. Major target milestones:

Delivery of first MPLM to KSC	April	1998
Initial Launch of first MPLM	June	1999
Delivery of second MPLM to KSC	November	1998
Initial Launch of second MPLM	January	2000
Delivery of third MPLM to KSC	October	2000
Initial Launch of third MPLM	September	2001

- 5.3. NASA and ASI will develop, maintain and exchange coordinated implementation schedules. These schedules, including the dates for the above milestones, will be updated as necessary and formally controlled in appropriate program documentation as provided for in Article 7.

Article 6 - Respective Responsibilities

6.1 NASA Responsibilities

- 6.1.(a) While undertaking activities related to the detailed design and development of the ISS elements, and consistent with the management arrangement identified in Article 7 and in accordance with system-level specifications established in the Space Station Systems Specification document and MPLM segment specification document which are controlled by the Space Station Control Board, NASA will:
- (1) provide overall systems engineering and integration management and authority for the ASI-provided elements, associated GSE, and software, and be responsible for overall system specifications and interface control documentation;
  - (2) perform formal acceptance of the ASI-provided flight units and associated GSE;
  - (3) establish, in consultation with the ISS partners, overall ISS verification, safety and mission assurance (as defined in Article 13) requirements and plans; and establish, in consultation with ASI, ASI-provided element verification, safety and mission assurance (as defined in Article 13) requirements and plans that meet or exceed the overall ISS and Space Shuttle verification, safety and mission assurance requirements and plans;

(4) approve ASI verification and certification, as identified in the documentation described in the NASA/ASI JMP, of ASI-provided elements and software for initial launches and all subsequent launch packages containing ASI-provided elements and software;

(5) establish, in consultation with ASI, requirements for overall system level testing and operations;

(6) specify, in consultation with ASI, technical and operational interfaces between the ASI-provided elements and the ISS and Space Shuttle;

(7) specify, in consultation with ASI, technical and operational interfaces between the ASI-provided elements and the payload and/or systems racks or other payload hardware;

(8) provide all orbital support equipment (OSE) and flight support equipment (FSE) to be used in conjunction with ASI-provided elements;

(9) provide additional equipment and associated documentation as may be identified in the documents described in the NASA/ASI JMP; and,

(10) establish, in consultation with ASI, a technical and management information system for computer-based electronic flow of appropriate program information as delineated in the NASA/ASI JMP.

6.1.(b) While undertaking the assembly, operation and utilization of the ISS and consistent with management arrangements identified in Article 10, NASA will:

(1) acquire and process engineering data to assess flight performance of the ASI-provided elements;

(2) make available to ASI, at a gateway in the United States, all on-orbit engineering data of the ASI-provided elements.

(3) approve ASI verification and certification, as identified in the documentation described in the NASA/ASI JMP, of ASI-provided elements and software for initial launches and all subsequent launch packages containing ASI-provided elements and software;

(4) perform all on-orbit operations of the ASI-provided flight elements;

(5) perform overall training management;

- (6) perform the analytical and physical integration of cargo into the MPLMs with ASI support and participation, as mutually agreed.
- (7) provide overall logistics support management and, for hardware purchased from U.S. companies, all spares and spares maintenance, transportation of spares to and from KSC, inventory data, maintenance schedules, and technical data;
- (8) provide or arrange for transportation and communications services to and from the ISS for ASI-provided payloads and samples, according to the terms established in Article 9.4;
- (9) integrate the ASI-provided elements with the Space Shuttle and the ISS as required;
- (10) perform all ground operations, such as prelaunch and post landing operations, for the ASI-provided elements;
- (11) perform sustaining engineering functions for the GSE provided by ASI to NASA in accordance with Article 4.1;
- (12) perform the physical, analytical, and on-orbit activities necessary for integration of ASI-provided payloads which meet appropriate standard interfaces as agreed by NASA and ASI (e.g., EXPRESS racks and EXPRESS pallets, International Standard Payload Rack (ISPR)); and,
- (13) make available to ASI, at a gateway in the United States, all on-orbit data relevant to the ASI-provided payloads and provide reception from Italy and uplink to orbit of related commands, and communications, according to the terms established in Article 9.4.

## **6.2 ASI Responsibilities**

**6.2.(a)** While undertaking activities related to the detailed design and development of the ISS elements described in Article 3, and consistent with the management arrangement identified in Article 7 and in accordance with system-level specifications established in the Space Station Systems Specification document and MPLM segment specification document which are controlled by the Space Station Control Board, ASI will:

- (1) design, fabricate, test and deliver to KSC three MPLM flight elements complete with subsystems and ground support equipment and associated

software as required to operate these elements. ASI will provide only that GSE which is not either (i) functionally and physically common to equipment already developed by NASA for other elements or (ii) available to support MPLM hardware and software. For support equipment, this provision will be fulfilled in the bilateral documents described in the NASA/ASI JMP and taking into account commonality and respective NASA and ASI responsibilities. These elements will be compatible with launch and return using the U.S. Space Shuttle;

(2) establish, in consultation with NASA, ASI-provided element verification, safety and mission assurance (as defined in Article 13) requirements and plans that meet or exceed the overall ISS and Space Shuttle verification, safety and mission assurance requirements and plans;

(3) perform flight readiness certification, as identified in the documentation described in the NASA/ASI JMP, of ASI-provided elements and software, including GSE, for initial flights and for all subsequent flights requiring ASI support and operations;

(4) provide to NASA all design, integration, test and operational data for the three MPLMs, necessary for NASA to: (i) understand the impact of the ASI-provided elements on the ISS and/or on the coordinated operation and utilization of the ISS; (ii) integrate those ASI-provided elements into the ISS and the Space Shuttle; (iii) certify that the ASI-provided elements are acceptable and safe for launch, on-orbit assembly and orbital operations; (iv) support orbital operations; and, (v) maintain interface documentation;

(5) provide additional equipment and associated documentation as may be identified in the documents described in the NASA/ASI JMP;

(6) provide mock-ups, simulators, and/or trainers of the MPLM as necessary to support engineering analyses and crew training, as identified in the documentation described in the NASA/ASI JMP;

(7) perform verification of the MPLMs;

(8) deliver GSE to KSC together with flight hardware;

(9) deliver MPLM flight hardware to KSC as detailed in Article 5.2 ;

(10) provide all operations and maintenance requirements and specifications and required GSE (with associated drawings and operation



manuals) to support processing of ASI-provided elements at KSC. ASI elements and support equipment will be designed to be compatible with KSC facilities and checkout systems; and,

(11) establish and maintain a computerized technical and management information system compatible with the management arrangements defined in Article 7. ASI will provide hardware and software based on information format and communications standards established by NASA.

**6.2.(b)**

While undertaking activities related to assembly, operation and utilization of the ISS and consistent with management arrangements identified in Article 10, ASI will:

(1) through designated center(s) in Italy, provide engineering and logistics support for ASI-provided elements as detailed in documentation described in the NASA/ASI JMP. The engineering support capability shall include systems analyses, evaluation and assessments as requested by NASA and as detailed in the documentation specified in the NASA/ASI JMP;

(2) provide resident personnel at KSC to provide expertise on all MPLM systems and to support ground processing of ASI-provided hardware;

(3) provide resident personnel for support of system operations and training concerning ASI-provided hardware at JSC;

(4) develop, maintain and utilize mathematical models for integration analyses of MPLM cargo with respect to loads, thermal, power, and data; perform mission-unique stress assessments based on the NASA design and verification loads and analyses; and support and participate, as agreed with NASA, in analytical and physical integration of cargo into the MPLMs.

(5) provide simulators or simulation software necessary to support KSC processing of ASI-provided hardware as identified in documents as specified in the NASA/ASI JMP;

(6) perform flight readiness certification, as identified in the NASA/ASI JMP, of ASI-provided elements and software, including GSE, for initial flights and for all subsequent flights requiring ASI support and operations;

(7) provide support for development of training requirements, materials and aids, and provide support to training for the on-orbit crew, ground support personnel and ground processing personnel for the ASI provided elements and support equipment at NASA Centers, or at an ASI Center, as

detailed in the documents specified in the NASA/ASI JMP;

- (8) With the exception of GSE provided to NASA in accordance with Article 4.1, perform sustaining engineering functions for hardware, software and support equipment, which it provides, for the operational lifetime of the hardware and software;
- (9) perform any support required for on-orbit verification and operations readiness, residual Design, Development, Test and Engineering (DDT&E) including support for assembly operations, and design modifications for nominal performance;
- (10) provide any replacement or upgrade of hardware, software, technical data and documentation resultant from sustaining engineering analyses;
- (11) perform refurbishment and repairs of the MPLMs beyond the capabilities of KSC except for hardware purchased in the United States;
- (12) provide logistics support on ASI-provided elements including, for hardware purchased from non-U.S. companies, all spares and spares maintenance, transportation of spares to and from KSC, inventory data, maintenance schedules, and technical data;
- (13) provide or arrange for use of equipment and software necessary for ASI to receive MPLM on-orbit engineering data made available by NASA at a gateway in the United States;
- (14) provide or arrange for use of equipment and software necessary for ASI to receive ASI payload-related data made available by NASA at a gateway in the United States;
- (15) provide required analyses and support for all ASI payloads proposed for operation on the ISS; and,
- (16) provide payloads that meet ISS defined standard interfaces (e.g., EXPRESS racks or pallets, ISPR).

Article 7 - Program Management Primarily Associated with Design and Development

- 7.1. The NASA/ASI Management arrangement is based on concurrent processes involving several interfaces between the Parties: a top-level NASA/ASI Executive Committee; a Space Station Control Board (SSCB),

and, in accordance with respective responsibilities, its supporting design and development working groups; on-site liaison personnel; and contractor-to-contractor interface between the Parties' prime contractors.

7.1.(a) The Executive Committee will meet annually to review the status of the program, and as required to resolve those issues brought forward from the SSCB by ASI. The Executive Committee will also meet annually to approve the ASI Utilization Plan as defined in Article 10. The Executive Committee will be cochaired by designated NASA and ASI representatives. Members will include representatives from other NASA program offices as required, and their ASI counterparts.

7.1.(b) ISS requirements, configuration including assembly sequence, integrated traffic planning, allocation of housekeeping resource for design purposes, and definition of element interfaces through the completion of assembly and initial operational verification and any related ISS configuration activities will be controlled by the Space Station Control Board (SSCB) chaired by NASA. ASI is currently a member of the SSCB, and of such subordinate design and development boards thereof as may be agreed, attending and participating when these boards consider items which affect the ASI-provided elements, interfaces between NASA-provided and ASI-provided elements, interfaces between the ASI-provided elements and the ISS partner elements, or interfaces between ASI-provided elements and the Space Shuttle. NASA will participate in the ASI control board organization, and of such subordinate boards thereof as may be agreed, attending and participating as appropriate.

Decisions by the SSCB Chairman may be appealed to the Executive Committee; however, it is the duty of the SSCB Chairman to make every effort to reach consensus with ASI rather than have issues referred to the Executive Committee. Such appeals will be made and processed expeditiously. Pending resolution of appeals, ASI need not proceed with the implementation of a SSCB decision as far as its provided elements are concerned; NASA may, however, proceed with implementation of an SSCB decision as far as its provided elements are concerned. Upon Executive Committee resolution of any appeal, the Parties shall proceed immediately to implement those resolutions.

7.1.(c) In addition to ASI's participation in the SSCB, ASI may monitor day-to-day program activities through a program liaison. The ASI liaison will be stationed at the Space Station Program Office at JSC to facilitate ASI program management's visibility to enable ASI to monitor the program on a technical level. The ASI liaison may serve as the ASI alternate to the

SSCB. On a reciprocal basis, NASA and/or its prime contractor may wish to have program liaison at ASI's contractor facility in Turin, Italy.

In order for the NASA and ASI liaison personnel to keep abreast of overall program requirements and milestone schedules, and monitor program progress at a technical level, they will be on the distribution list for technical reports and documentation as appropriate and will attend all joint program related technical meetings.

The Parties' liaison personnel are not considered to be part of the receiving Party's program office and as such, the sending Party is financially responsible for its liaison personnel. Additional liaison requirements may be documented in a separate Liaison Personnel Agreement between the Parties.

7.1.(d) NASA's Space Station prime contractor will act on NASA's behalf as the Systems Engineering & Integration manager for the ASI-provided elements and will interface directly with ASI and ASI's prime contractor.

7.1.(e) Consistent with the above NASA/ASI management arrangement, NASA and ASI will work through their respective prime contractors to facilitate the use of common hardware, software and support equipment in order to promote efficient and effective ISS operations.

7.1.(f) Upon transfer of ownership of each ASI-provided element, NASA will become responsible for all aspects of its operation and utilization management.

7.1.(g) The Executive Committee may make changes in the NASA/ASI management arrangement after ownership of the ASI-provided elements is transferred to NASA.

## 7.2 Program Documentation

7.2.(a) The NASA/ASI Joint Management Plan (JMP) defines the programmatic and technical coordination processes and jointly developed documentation used by NASA and ASI for all ISS design, development and implementation activities, as well as operations and utilization activities during assembly. The JMP will define NASA's and ASI's respective roles, responsibilities and relationships for ISS program activities. The JMP and all changes to the plan will be jointly signed by the designated representatives of NASA and ASI.

- 7.2(b) The Concept of Operations and Utilization (COU) document is the source of information which describes how the ISS operates and is operated. The document addresses the operating principles, mission profiles and scenarios and processes that support ISS design, development and operations preparation. The content of the document will be consistent with the tasks and products produced or prepared by the ISS partners and ASI. This document, during the detailed design and development phase of the program, is under control of the SSCB. However, decisions regarding operation and utilization activities will be taken in accordance with Article 10.
- 7.2 (c) NASA, in conjunction with the ISS partners and ASI, develops an overall Space Station Systems Specification based on information provided by ISS partners and ASI, which contains the performance and design requirements for the ISS flight elements and ground facilities hardware and software and provides the technical basis for overall conduct of ISS detailed design and development activities. The Systems Specification, approved by the SSCB, contains the requirements related to all ISS partners' and ASI's elements. Any modification to the Systems Specification will be approved by the SSCB. The Systems Specification also includes NASA/ASI joint requirements. This section will be cosigned by NASA and ASI.
- 7.2(d) NASA and ASI will develop and jointly sign an MPLM Segment Specification that meets the requirements of the Systems Specification. The MPLM Segment Specification will be controlled by the SSCB. ASI will develop element specifications for ASI hardware/software and these specifications will meet the requirements in the jointly signed Segment Specification and the Systems Specification.
- 7.2 (e) NASA and ASI will jointly develop and sign Interface Control Documents (ICDs) which control interfaces between: the flight elements comprising infrastructural elements and the flight elements comprising accommodations elements; between flight elements comprising infrastructural elements, and, as appropriate, between any other flight elements; between flight and ground elements, or among ground elements. Any modifications or additions to the ICDs will occur through the SSCB or one of its subordinate boards of which ASI is a member, or through an SSCB-approved process. NASA will also develop a Baseline Configuration Document (BCD) based on information provided by all ISS partners and ASI, which will be the reference document reflecting the configuration of the ISS.
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Article 8 - Access to and Use of the MPLMs

- 8.1. NASA will have complete access to and use of the MPLMs. The capabilities of the MPLMs will be made available to the ISS partners, pursuant to Article 8 of the Space Station Memoranda of Understanding or any superseding agreements.

Article 9 - ASI access to and Use of the International Space Station

- 9.1.(a) ASI's access to and use of the ISS reflects ASI's contribution of the MPLMs, their support equipment and post-delivery support.
- 9.1.(b) In exchange for ASI's provision of the three MPLM flight units, associated unique ground elements, and post-delivery support as defined in Article 6, NASA will provide ASI with the following share of the allocations available to NASA as specified in Article 8 of the Space Station Memoranda of Understanding or any superseding agreements: 0.85 percent of pressurized user accommodations; 0.85 percent of accommodations for external payloads; and 0.85 percent of utilization resources.
- 9.2. ASI's allocations of user accommodations and utilization resources as specified above in 9.1.(a) and 9.1.(b) will begin after the first MPLM is verified on orbit, unless otherwise mutually agreed.
- 9.3. ASI may at any time barter for, sell to NASA or the ISS partners, or enter into other arrangements for any portion of its ISS allocations, and is free to market the use of its allocations according to procedures established in the ISS multilateral Utilization Management Plan (UMP), and in accordance with the 1988 IGA or any superseding Intergovernmental Agreement. The terms and conditions of any barter or sale will be determined on a case-by-case basis by the parties to the transaction. ASI may retain any revenues it derives from such marketing, and must ensure that the obligations it has undertaken under this MOU are met.
- 9.4. NASA will provide Space Shuttle launch and return transportation services for ASI's utilization allocation under this MOU, commensurate with ASI's allocation of utilization resources identified in Article 9.1. (The foregoing does not apply to launch and return capacity provided to and from the ISS in connection with ISS evolutionary additions). Any special user integration or user operation support will be provided on a reimbursable basis at prices routinely charged to comparable users for similar services. NASA will also provide Tracking and Data Relay Satellite System (TDRSS)

data transmission services for ASI's utilization allocation under this MOU, commensurate with ASI's allocation of utilization resources identified in Article 9.1.

NASA will respect the proprietary rights in, and confidentiality of, ASI's appropriately marked data and goods to be transported on the Space Shuttle. In addition, ASI may implement measures necessary to ensure confidentiality of ASI utilization data passing through the ISS communications and data systems and other communications systems being used in conjunction with the ISS. Notwithstanding the foregoing, data that are necessary to assure safe operations will be made available according to procedures established by the User Operations Panel (UOP). The proprietary rights in, and the confidentiality of, ASI's utilization data passing through these communications systems will be respected.

**Article 10 - Program Management Primarily Associated with Operations and Utilization**

- 10.1. NASA has the responsibility for the overall planning for and coordination of the execution of the overall integrated operation of the ISS. NASA and the Cooperating Agencies, identified in Article 4.1 of the 1988 IGA or corresponding provisions of any superseding Intergovernmental Agreement, each have responsibilities regarding the management of their respective operations and utilization activities. Operations and utilization activities will comprise long-range planning and top-level management and coordination, which will be performed by strategic-level organizations; detailed planning and support to strategic-level organizations which will be performed by tactical-level organizations; and implementation of these plans which will be performed by execution-level organizations.

Consistent with the Parties' rights and obligations under this Agreement, NASA will represent ASI on ISS multilateral utilization and operations boards. Upon request, ASI will provide expertise in matters involving ASI-provided payloads or other ASI utilization interests.

- 10.2 On an annual basis ASI will develop a five year Utilization Plan for all proposed uses of its allocations defined in Article 9. ASI will also satisfy the requirements of its users for storage within its allocations defined in Article 9. ASI will prioritize and propose appropriate schedules for the user activities in its Utilization Plan, including the use of user support centers and other ISS ground elements to support the utilization of the flight elements.

If ASI's planned utilization does not involve cooperative participation with a NASA user program office, the ASI Utilization Plan will be delivered to the Associate Administrator for Space Flight. Following verification that the ASI Utilization Plan is consistent with the agreed ASI utilization accommodations, the ASI Utilization Plan will be approved by the NASA/ASI Executive Committee. Any proposed utilization of a user accommodation element by ASI, however, on behalf of a non-Partner or a private entity under the jurisdiction of a non-Partner will require the review and concurrence of NASA and of the Partner owning that user accommodation. The Associate Administrator for Space Flight is responsible for ensuring representation of the ASI Utilization Plan within the U.S. Space Station Utilization Board (SSUB) and for ensuring its inclusion in the U.S. Partner Utilization Plan (PUP).

- 10.3. If any of the planned utilization involves a cooperative effort with a NASA user program office, involving barter or consolidation with U.S. utilization resources, that part of the ASI Utilization Plan will be developed in conjunction with the specific cooperating NASA program office, and will be included in the utilization plan of that NASA user program office. In this case, the SSUB member representing the cooperating NASA user program office is responsible for ensuring its inclusion in the U.S. PUP.
- 10.4. The U.S. PUP will be provided to the multilateral UOP as input for developing the Consolidated Operations and Utilization Plan (COUP). The UOP, in coordination with the System Operations Panel (SOP), is responsible for verifying the technical and operational compatibility of all utilization activities on the ISS, and for providing the COUP to the Multilateral Coordination Board for approval. Development and updating of the U.S. Utilization Plan will be in accordance with appropriate schedules and procedures established by the U.S. SSUB and the UOP. Specific details concerning the development and updating of the ASI Utilization Plan to enable its incorporation into the U.S. Utilization Plan will be provided by the NASA Office of Space Flight.
- 10.5. In working out problems that may arise after the development of the COUP, in the case of technical or operational incompatibility between users or with available resources, the Cooperating Agency, as identified in Article 4.1 of the 1988 IGA or any superseding Intergovernmental Agreement, providing the element(s) in which users have accommodations, as well as other impacted uses, will provide appropriate analyses and recommendations to the appropriate strategic, tactical, or execution-level organization for resolution of conflicts. However, if such conflict only has impacts within a single ISS element and only impacts users of the



provider of that element, the Cooperating Agency providing the element will be responsible for resolving such conflicts. ASI will assist NASA in any such conflict resolution involving ASI-provided payloads by providing appropriate analyses and recommendations which will be forwarded to the appropriate strategic, tactical or execution-level organization.

- 10.6 Prior to their implementation, NASA will provide copies of tactical utilization plans to ASI for its review and comment. Furthermore, NASA will consult with ASI regarding revisions or modifications to such plans prior to their approval. ASI, or its designated representatives, will participate in user working groups responsible for detailed mission planning for those increments which include ASI-provided payloads.
- 10.7 Should ASI utilization involve a cooperative effort using NASA user program office facilities, then the terms of such cooperation will be contained in a separate agreement between the Parties.
- 10.8 Those ASI-provided payloads included in the U.S. Utilization Plan will be subjected to the same reviews and certifications as all U.S. payloads.

#### Article 11 - ASI-provided International Space Station Crew

- 11.1. In exchange for ASI's provision of the three MPLM flight units, associated unique ground support equipment, and post-delivery support as defined in Article 6, NASA will provide ASI with the equivalent of one ASI-provided ISS crew member for one on-orbit increment every five years from NASA's crew allocation, with an assured minimum of three such opportunities during the life of the program.
- 11.2. NASA will provide flight opportunities for ASI ISS crew as identified above from NASA's crew allocation under the 1988 Space Station Agreements or any superseding agreements. ASI's accrual of flight opportunities will commence with the flight of the first MPLM to the ISS. Flight of ASI ISS crew will be satisfied over time, not necessarily on each specific crew rotation cycle. Subject to agreement by the Parties, ASI may be provided with Space Shuttle crew assignments in lieu of ISS crew, during the period between first MPLM launch and permanent habitation of the ISS by seven crewmembers. During assembly and verification of the first MPLM, a fully trained ASI crewmember will participate in on-orbit assembly and system verification and other assigned tasks planned during that on-orbit period, and two additional Space Shuttle crew opportunities will be provided during the life of the ISS program.

- 11.3. ASI ISS crew will meet ISS astronaut certification criteria for basic qualification requirements, medical certification standards, and general and personal suitability requirements. Potential ASI ISS crew will be selected to join NASA astronaut candidates for basic training with NASA. Following successful completion of basic training, NASA and ASI will jointly certify that the ASI ISS crew have met the Astronaut Certification Criteria. Following joint certification, all ASI crew will enter into an appropriate training cycle in order to acquire the skills necessary to conduct ISS operations and utilization. The Multilateral Crew Operations Panel (MCOP), comprised of members from each ISS Partner, will designate from among the certified ISS crew, specific crew complements, which include the ISS Commander, for specific crew rotation cycles, consistent with Articles 11.1. and 11.2. above. NASA will represent ASI on the MCOP.
- 11.4. ASI will itself be bound and will ensure that its ISS crew sign and be bound by the Code of Conduct for the ISS crew, that will be developed and approved by all the ISS partners in accordance with the Space Station Memoranda of Understanding.
- 11.5. ASI will be financially responsible for all compensation, medical expenses, subsistence costs on Earth, and training for ISS crew which it provides. Full training for all assigned duties will be required.

#### Article 12 - Standards, Specifications, Reviews and Language

- 12.1. Standards and specifications will be developed as part of the NASA/ASI JMP and associated bilateral documentation and will constitute the specific requirements for control purposes in this cooperative program.
- 12.2. A schedule of preliminary and critical design reviews for the ASI-provided elements will be made, with joint participation of the Parties in all such reviews. These and other reviews conducted by the Parties will be defined and scheduled in the NASA/ASI Joint Management Plan. Relevant information from similar ISS reviews having a bearing on the ASI-provided elements will be transmitted to ASI expeditiously.
- 12.3. All communication and documentation for this project will be in the English language.
- 12.4. The ASI-provided elements will be designed and developed in the metric system of units. The primary system of units at the interfaces between the ASI-provided hardware and the ISS, however, will be the inch/pound

system. The metric system of units may be used as the secondary system of units at the interfaces.

### Article 13 - Safety and Mission Assurance

- 13.1. In order to assure safety, NASA has the responsibility, working with the ISS partners, to establish overall ISS safety and mission assurance requirements and plans covering ISS detailed design and development activities and mature operations and utilization. In order to assure safety, NASA has the responsibility, working with ASI, to establish overall safety and mission requirements and plans relating to the MPLMs.
- 13.2. Consistent with the management arrangement identified in Article 7, ASI will develop detailed safety and mission assurance requirements and plans for the MPLMs and associated GSE and software. Such requirements and plans must meet or exceed the overall ISS safety and mission assurance requirements and plans established by NASA working with the ISS partners, and the Space Shuttle safety requirements established by NASA. Upon NASA approval of the ASI safety and mission assurance requirements and plans, ASI will have the responsibility to implement applicable overall and detailed ISS and Space Shuttle safety and mission assurance requirements and plans throughout the lifetime of the program, and to certify that such requirements and plans have been met with respect to the ISS elements and payloads it provides. NASA will have the overall responsibility to certify that the ISS as a whole and its elements and payloads are safe.
- 13.3. NASA will conduct overall integrated system safety reviews for ISS elements, launch package stage and payloads, as well as conduct safety reviews of the ASI-provided elements and payloads. ASI will support these reviews and participate, as appropriate, in any ISS safety review boards established by NASA.
- 13.4. The ISS partners will establish contingency procedures for on-orbit emergencies to protect the safety of the ISS and its crew. The ISS partners will also establish a process for consultations in the event of on-orbit emergencies for which contingency procedures do not exist. If this consultation process cannot be followed within the time required, due to the nature of the emergency, or if consensus cannot be reached within the time required, NASA will have the responsibility for making decisions necessary to protect the safety of the Space Station and its crew, following procedures agreed in advance for implementation of such decisions. Upon request by ASI, NASA will provide information regarding an action that it

has taken in connection with this responsibility.

#### Article 14 - Cross-Waiver of Liability

- 14.1. The undertakings of the United States and the Republic of Italy as Partner States expressed in Article 16 of the 1988 IGA, or any superseding Intergovernmental Agreement, apply in all respects to the activities of NASA and ASI as Parties to this MOU and acting for their respective governments consistent with those undertakings. In addition, this MOU constitutes fulfillment of the relevant obligation of the United States, pursuant to Article 16.3(b) of the 1988 IGA or any superseding Intergovernmental Agreement, to extend the cross-waiver of liability to related entities.

#### Article 15 - Financial Arrangements

- 15.1. The Parties will each bear the costs of discharging their respective responsibilities, including travel and subsistence of their own personnel and ground and air transportation of all equipment for which they are responsible.
- 15.2. The ISS program will be responsible for all Space Shuttle launch costs associated with the MPLMs.
- 15.3. The ability of NASA and ASI to carry out their respective obligations is subject to their respective funding procedures and the availability of appropriated funds.
- 15.4. In the event that funding problems arise that may affect a Party's ability to fulfill its responsibilities under this MOU, that Party will promptly notify and consult with the other Party.
- 15.5. The Parties will seek to minimize the exchange of funds while carrying out their respective responsibilities in this cooperative program, including, if they agree, through the use of barter, that is, provision of goods and services.

**Article 16 - Customs Clearance and Visas**

- 16.1. The Parties shall arrange in their respective countries for free customs clearance of equipment required for this project. Such arrangements shall be fully reciprocal.
- 16.2. The Parties will use their best efforts to facilitate the issuance of appropriate visas for NASA and ASI personnel, including contractors participating in this program.

**Article 17 - Public Information**

- 17.1. Release of public information regarding this project may be made by the appropriate agency for its own portion of the program as desired, and insofar as participation of the other Party is concerned, after suitable consultation.
- 17.2. When necessary, detailed arrangements for implementing public information activities foreseen under this Article will be mutually agreed.

**Article 18 - Exchange of Data and Goods**

- 18.1. Except as otherwise provided in this paragraph, each Party will transfer all technical data and goods considered to be necessary (by both Parties to any transfer) to fulfill its respective responsibilities under this MOU. Each Party undertakes to handle expeditiously any request for technical data or goods presented by the other Party for the purposes of this cooperation. This paragraph will not require either Party to transfer any technical data and goods in contravention of its national laws or regulations.
- 18.2. The Parties will make their best efforts to handle expeditiously requests for authorization of transfers of technical data and goods by persons or entities other than the Parties (for example, company-to-company exchanges which are likely to develop), and they will encourage and facilitate such transfers in connection with the cooperation under this MOU. Otherwise, such transfers are not covered by the terms and conditions of this Article. National laws and regulations will apply to such transfers.
- 18.3. The Parties agree that the transfers of technical data and goods under this MOU will be subject to the restrictions set forth in this paragraph. The transfer of technical data for the purposes of discharging the Parties' responsibilities with regard to interfaces, integration and safety will

normally be made without the restrictions set forth in this paragraph. If detailed design, manufacturing, and processing data and associated software is necessary for interface, integration or safety purposes, the transfer will be made, but the data and associated software may be appropriately marked as set out below. Technical data and goods not covered by the restrictions set forth in this paragraph will be transferred without restrictions, except as otherwise restricted by national laws or regulations.

(a) The furnishing Party will mark with a notice, or otherwise specifically identify, the technical data or goods that are to be protected for export control purposes. Such a notice or identification will indicate any specific conditions regarding how such technical data or goods may be used by the receiving Party and its contractors and subcontractors, including (1) that such technical data or goods will be used only for the purposes of fulfilling the receiving Party's responsibilities under this MOU and for the purposes of NASA fulfilling its responsibilities under the 1988 Space Station Agreements or any superseding agreements, and (2) that such technical data or goods will not be used by persons or entities other than the receiving Party, its contractors or subcontractors, or for any other purposes, without the prior written permission of the furnishing Party.

(b) The furnishing Party will mark with a notice the technical data that are to be protected for proprietary rights purposes. Such notice will indicate any specific conditions regarding how such technical data may be used by the receiving Party and its contractors and subcontractors, including (1) that such technical data will be used, duplicated, or disclosed only for the purposes of fulfilling the receiving Party's responsibilities under this MOU and for the purposes of NASA fulfilling its responsibilities under the 1988 Space Station Agreements or any superseding agreements, and (2) that such technical data will not be used by persons or entities other than the receiving Party, its contractors or subcontractors, or for any other purposes, without the prior written permission of the furnishing Party.

(c) In the event that any technical data or goods transferred under this Agreement are classified, the furnishing Party will mark with a notice, or otherwise specifically identify, such technical data or goods. Either Party may require that any such transfer be pursuant to a security of information agreement or arrangement which sets forth the conditions for transferring and protecting such technical data or goods. A transfer need not be conducted if the receiving Party does not provide for the protection of the secrecy of patent applications containing information that is classified or otherwise held in secret for national security purposes. Classified

information and material will be furnished only through government to government channels or channels approved by the designated security authorities of the Parties. Such information and material will bear the level of classification and denote the country of origin. Classified information or material exchanged or generated pursuant to this MOU will be used, transmitted, stored, handled and safeguarded in accordance with the U.S. Italian General Security Agreement of August 4, 1964, as amended September 2, 1980, and the Industrial Security Annex thereto of November 27, 1985. No classified technical data or goods will be transferred under this MOU unless both Parties agree to the transfer.

- 18.4. Each Party will take all necessary steps to ensure that technical data or goods received by it under subparagraphs 3(a), 3(b), or 3(c) above will be treated by the receiving Party, and other persons and entities (including contractors and subcontractors) to which the technical data or goods are subsequently transferred in accordance with the terms of the notice or identification. Each Party will take all reasonably necessary steps, including ensuring appropriate contractual conditions in their contracts and subcontracts, to prevent unauthorized use, disclosure, or retransfer of, or unauthorized access to, such technical data or goods. In the case of technical data or goods received under subparagraph 3(c) above, the receiving Party will accord such technical data or goods a level of protection at least equivalent to the level of protection accorded by the furnishing Party.
- 18.5. It is not the intent of the Parties to grant, through this MOU, any rights to a recipient beyond the right to use, disclose, or retransfer received technical data or goods consistent with conditions imposed under this Article.
- 18.6. Withdrawal from this MOU by either Party will not affect rights or obligations regarding the protection of technical data and goods transferred under this Agreement prior to such withdrawal, unless otherwise agreed in a withdrawal agreement pursuant to Article 21.
- 18.7. The Parties will establish guidelines for security of information.

#### Article 19 - Rights in Inventions and Patents; Data Rights

- 19.1. Nothing in the MOU shall be construed as granting or implying any rights to, or interest in, patents or inventions of the Parties or their contractors or subcontractors.

- 19.2 With regard to utilization of the ISS, each Party will retain rights to, and interest in, data resulting from its respective scientific or other use of the ISS, unless agreed by the Party in a separate utilization agreement. Furthermore, no other provision in this MOU shall otherwise be construed as granting or implying any rights to, or interest in, such data.

#### Article 20 - Consultation and Settlement of Disputes

- 20.1 Any dispute which is not settled through the mechanisms provided for in Article 7, or any other issue concerning the interpretation or implementation of the terms of this MOU that cannot be resolved otherwise, will be referred to the appropriate level of authority of the Parties for consideration and action. If an issue is not resolved through such consideration and action, the Parties may refer the matter to an agreed form of dispute resolution, such as conciliation, mediation, or arbitration.
- 20.2 Unless otherwise agreed between the Parties, implementation of decisions made pursuant to mechanisms provided for in this MOU will not be held in abeyance pending settlement of issues under this Article.

#### Article 21 - Withdrawal

- 21.1 NASA or ASI may withdraw from this MOU at any time by giving the other Party at least one year's prior written notice. If either Party gives notice of withdrawal from the MOU, NASA and ASI will endeavor to reach agreement concerning the terms and conditions of either Party's withdrawal before the effective date of withdrawal, considering the objectives of this MOU. Moreover, recognizing the critical importance of the ASI-provided elements to the International Space Station program, if ASI withdraws, ASI, if requested, will immediately make available hardware, drawings, documentation, software, spares, tooling, special test equipment, and/or any other necessary items related to its responsibilities under this agreement.
- 21.2 Upon ASI's notice of withdrawal for any reason, NASA and ASI will expeditiously negotiate a withdrawal agreement. Should such agreement provide for the permanent transfer to NASA of ASI elements and associated equipment, it will also provide for NASA to give ASI adequate compensation for such transfer.



21.3.

Withdrawal by either party will not affect that Party's continuing rights and obligations under this MOU with regard to liability and the protection of intellectual property and data unless otherwise agreed in a withdrawal agreement pursuant to Article 21.2. above.

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Article 22 - Amendments

22.1.

This Agreement may be amended by written agreement of the Parties. Each Party may propose to the other amendments to this Agreement in writing.

Article 23 - Entry into Force and Duration

23.1.

This MOU will enter into force upon the entry into force of an agreement incorporating its terms, to be effected by an exchange of diplomatic notes, between the Government of the United States of America and the Republic of Italy. It will remain in effect for the duration of the United States Space Station Program. Upon entry into force, this MOU will supersede the 1991 Memorandum of Understanding Between the United States National Aeronautics and Space Administration and the Italian Space Agency for the Design, Development, Operation and Utilization of Two Mini Pressurized Logistics Modules and a Mini Laboratory for Space Station Freedom.

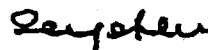
Done at Rome, Italy, in two originals in the English language.

FOR THE UNITED STATES  
NATIONAL AERONAUTICS AND  
SPACE ADMINISTRATION:



Date: 09011. 1997

FOR THE  
ITALIAN SPACE AGENCY:



Date: 09011. 1997



*Embassy of the United States of America*

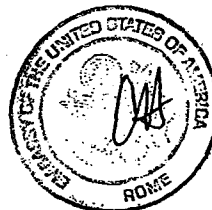
No. 33

The Embassy of the United States of America presents its compliments to the Ministry of Foreign Affairs of the Italian Republic and has the honor to refer to the Ministry's note No. 081/1110 of April 18, 2001, together with its attached Memorandum of Understanding between the U.S. National Aeronautics and Space Administration (NASA) and the Italian Space Agency (ASI) signed at Rome October 9, 1997 for the design, development, operation and utilization of three mini pressurized logistics modules for the International Space Station (the MOU), proposing an agreement between the two governments, pursuant to Article 23 of the MOU, establishing the terms for the bilateral cooperative program to be undertaken by NASA and ASI.

The Embassy accepts, on behalf of the Government of the United States of America, the Ministry's proposal and confirms that the Ministry's note, including the MOU, and this note in reply shall constitute an agreement between the two governments, which shall enter into force on the date of this note.

The Embassy of the United States of America takes this opportunity to renew to the Ministry of Foreign Affairs of the Italian Republic the assurances of its highest consideration.

Embassy of the United States of America,  
Rome, January 11, 2005.



Emil M. Skodon